Application No.: 10/550,297

Filing Date: September 21, 2005

LISTING OF THE CLAIMS

1-20. (Canceled)

- 21. (Previously presented) A biological prosthesis comprising an aortic valve obtained from an animal, through which aortic valve blood flows in a single direction, the aortic valve having a tubular outer wall, and at least one intraparietal reinforcement device comprising a rod implanted in said tubular outer wall of said aortic valve, the rod penetrating the thickness of the tubular outer wall of said aortic valve and extending substantially parallel to said direction of blood flow.
- 22. (Previously presented) A biological prosthesis according to claim 21, there being a plurality of said intraparietal reinforcement devices implanted in said outer tubular wall of said aortic valve, in spaced relation to each other.
- 23. (Previously presented) A biological prosthesis according to claim 22, wherein said intraparietal reinforcement devices are parallel to each other.
- 24. (Previously presented) A biological prosthesis according to claim 21, wherein said aortic valve has commissures that are parallel to said direction and perpendicular to said tubular wall of said aortic valve and joined to said tubular wall of said aortic valve, said intraparietal reinforcement device being implanted at the juncture of said outer tubular wall of said aortic valve and a said commissure.
- 25. (Previously presented) A biological prosthesis according to claim 24, wherein said aortic valve has three said commissures and there is a said intraparietal reinforcement device implanted at the juncture of each said commissure with said tubular outer wall of said aortic valve.
- (Previously presented) A biological prosthesis according to claim 25, said intraparietal reinforcement devices being spaced apart from each other.
- 27. (Previously presented) A biological prosthesis according to claim 21, wherein said intraparietal reinforcement device is covered with a fluoropolymer material.
- (Previously presented) A biological prosthesis according to claim 21, wherein said intraparietal reinforcement device is straight.
- Previously presented) A biological prosthesis according to claim 21, wherein said intraparietal reinforcement device has a helical shape.

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30. (Previously presented) A biological prosthesis according to claim 21, wherein said intraparietal reinforcement device has a helical surface portion.

- 31. (Previously presented) A biological prosthesis according to claim 21, wherein said intraparietal reinforcement device has a pointed end.
- 32. (Previously presented) A biological prosthesis according to claim 21, wherein said intraparietal reinforcement device has a cross piece at one end.
- 33. (Previously presented) A biological prosthesis according to claim 32, wherein said cross piece is a straight bar.
- 34. (Previously presented) A biological prosthesis according to claim 32, wherein said cross piece has the same curvature as said tubular wall of said aortic valve.
- 35. (Previously presented) A biological prosthesis according to claim 32, wherein there is a cross piece at each end of the intraparietal reinforcement device.